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## SUMMARY

This report summarizes the joint research activities of thirteen experimental social psychologists, from U.S. and European universities, who are informally organized to plan and conduct studies on conflict between individuals and groups.

New results are reported from the final analysis of the eight laboratory study of interpersonal bargaining. Analysis of differences among the eight sets of data suggests that the negotiation situation was defined in two rather different ways. This was reflected in different meanings given to the dimension of cooperation vs. competition in the interaction. At some sites, this dimension was given an "evaluative" meaning with the terms more or less equated with good vs. bad; at other sites, it was given a "dynamism" meaning with the terms connoting weak and passive vs. strong and active. Behavioral differences between the two sets of data are consistent with the interpretation that the "evaluative" outlook tends to define the bargaining situation in moral terms. Where to be "competitive" is, relatively speaking, to be "bad", the behavioral difference between cooperative and competitive pairs seems to be in terms of frequency of "bad" behaviors. But given this moralistic view of the relationship, cooperative pairs have almost as much difficulty in resolving their conflict as do competitive pairs. In contrast, in the "dynamism" samples, the subjects describing themselves as cooperators treated the negotiation problems as tasks to be solved by local and direct arrangements (e.g., allocation rules) and were able thereby to achieve high rates of agreement.

Money incentives (as compared with "point" scores) were found to shift the definition of the situation in the direction of the "evaluative" (task or instrumental) meaning. There is suggestive evidence that the more valuable incentive acts primarily to reduce the frequency of interfering behaviors in the "evaluation" samples but to increase agreement-promoting behaviors in the "dynamism" samples.

Results on perception of one another's dependence on the relationship (reflecting the perceived degree of conflict inherent to the relationship) are consistent with those from several other studies. The following hypothesis is suggested: When persons interacting in a mixed-motive relationship allocate responsibility for the conflict they experience, they underestimate the contribution of the common external situation (the bargaining problem) and overestimate the contribution of the other party.

# 1. Research on information acquisition under conflict.

The members who have worked on this topic are Flament, Kelley, Lanzetta, Nuttin and Tajfel. No further progress on this research is to be reported for the present period.

## 2. "International" bargaining experiment.

The research on bargaining has been conducted by Kelley, Snure, Deutsch, Faucheux, Lanzetta, Moscovici, Nuttin, Rabbie and Thibaut. The procedure for this study has been described in Technical Report No. 1, and the main results in each of the preceding reports. Final analyses were made of the data during the present reporting period and a final draft of the report was completed. This 100 page manuscript has been submitted to the Journal of Personality and Social Psychology for publication in their monograph series. Available upon request are mimeographed copies of the manuscript, entitled "A comparative experimental study of negotiation behavior". The abstract of the paper follows:

An experimental study of interpersonal negotiation was conducted at eight laboratories, three in Europe and five in the United States. The negotiation task was designed to permit study of the various ways in which persons deal with a mixed-motive; incomplete information problem which involves both distributive and integrative bargaining. The results for each of the three independent variables were as follows: (1) Increasing the difficulty of the bargaining problem was found to increase trial time and reduce the frequency of agreement. However, because in the present experiment the value of agreement is derived in part from its cumulative effect over trials, these relationships were different for pairs who had long vs. short histories of prior agreement. (2) A comparison of money and points incentives showed the former to have positive effects on the negotiation, both in terms of more favorable pre-interaction attitudes and, in addition, in terms of the subsequent interaction and the negotiation outcomes. The quicker and more dependable agreements produced under the money incentive are consistent with the view that increasing the value of the stakes has a beneficial effect on negotiation if the relation is one in which cooperative action yields clear mutual gains and is relatively invulnerable to exploitation. (3) The creation in one condition of an unequal dependence of the two parties upon agreement did not have the anticipated disruptive effect upon the interaction.

Analysis of differences among the eight sets of data suggests that the negotiation situation was defined in two rather different ways. This was reflected in different meanings given to the dimension of cooperation vs. competition in the interaction. At some sites, this dimension was given an "evaluative" meaning with the terms more or less equated with good vs. bad; at other sites, it was given a "dynamism" meaning with the terms connoting weak and passive vs. strong and active. These two different meanings were found to have different implications for the process and outcomes of the negotiation and for the relation between the pre-game attitudes of the players and their subsequent behavior.

a. Implications: Perhaps the most interesting and unexpected outcome of this experiment concerns the different meanings given by different subjects to "cooperative-competitive" and the implications of these different meanings for (1) the behavior in negotiation and (2) the effects of heightened incentives upon the course of the negotiation. (This general result has been reported on in earlier technical reports but the final analyses, in which the trends were statistically evaluated by analysis of variance, puts them in slightly different perspective.) The main result to be emphasized is that whereas the initial cooperativeness of the pair was associated with successful conflict resolution in the "dynamism" (D) sample, in the "evaluative" (E) sample, there was little relation between these two variables. This is of considerable interest, that the E definition of cooperativeness is such that pairs of subjects who described themselves as "cooperative" at the outset were little more able to agree than those who described themselves as "competitive". And this is the definition of cooperative-competitive in which the former means "good" (moral, honest, peaceful)!

Further behavioral differences between the two samples are consistent with the notion that the E sample tended to define the bargaining situation in moral terms. Where to be "competitive" is, relatively speaking, to be "bad", the behavioral difference between cooperative and competitive pairs seemed to be in terms of frequency of bad behaviors. What is most notable about the E sample is the fact that the "bad" behavior characteristic of the more competitive pairs was little more disruptive of agreement than was the relatively "good" behavior for the pairs who described themselves as cooperative. We may speculate that the initially cooperative E's created trouble for themselves by indulging in some misrepresentation (perhaps despite their moral scruples) to which the partners then overreacted. They infrequently used threat so it seems not to have been explicit power tactics which created trouble, but these cooperative E's did have many cases of not bargaining (a mild pressure tactic) which could easily have been another cause of their apparent difficulty.

In the D samples, where to be cooperative is to be passive and weak, the cooperative pairs created and used rules to settle the negotiation problems and were able thereby to achieve high rates of agreement. The psychological significance of the bargaining situation for the D sample seems best described in "task" or "instrumental" terms. The subjects describing themselves as cooperators seem to have treated the negotiation problems as tasks to be solved by local and direct arrangements and not (as their counterparts in the E sample) as interactions having wider, moral connotations. The competitive D's were low in rule usage but they did not, as a substitute, engage in active negotiation with threat and misrepresentation to the same degree as did their E counterparts. They appear to have used refusal to bargain and some hard bargaining and to have done so in a manner which kept both negotiation time and agreement rate at relatively low values.

With regard to the effects of the higher incentives (monetary vs. "point" scores), there are several respects in which the money incentive made the E sample like the D one. For example, whereas with the points incentive, the E sample was high on bargain hard with threat, in the money condition they were indistinguishable from the D sample. On the other hand, whereas money increased rule discussion for the D's, it decreased it for the E's. The implication of

these trends seems to be that while money inhibited certain behaviors characteristic of the E sample (and thereby decreased time and increased agreement), it did not encourage for these pairs the positive, rule-using behavior more characteristic of the D sample. Thus, of two general possible effects of higher incentives (reducing interfering behaviors and increasing agreement-promoting behaviors), the first seems to be more prominent in the E sample and the second, in the D sample.

It may also be noted that a tendency for money to change the definition of the situation in the direction of "dynamism" is suggested by factor analyses made of all the data from the five U.S. sites. These were made separately for the money and points conditions. While the basic factor structure is essentially the same for the two conditions, the cooperative-competitive scale loads more on the evaluative factor in the points condition and more on the dynamism factor in the money condition.

b. Sample differences: As noted above, we regard as a major outcome of this research the identification of the two different meanings given to cooperation vs. competition. In this and in other research (c.f., Shure, Meeker, Moore and Kelley, 1966; Kelley and Stahelski, in press), the orientation a person adopts before the interaction is found to predict his behavior in the interaction. Thus, this particular set of polar opposites seems to reflect important variations in orientation to the relationship. Our present evidence takes us considerably beyond this simple fact and shows that the cooperative-competitive distinction does not have a constant meaning but rather, varies from one situation or set of subjects to another. Presumably, these variations reflect different psychological definitions which may be given to the same objective bargaining situation. In some instances, the situation seems to be defined in moral terms and in this case to be cooperative is to be good (moral, honest). In other instances, the situation seems defined more in task or achievement terms and to be cooperative is to be weak and passive. Furthermore, our evidence suggests that the behavior associated with a cooperative or competitive outlook depends upon the definition of the situation.

The present study is not the first one in which our Working Group has found site differences. And it is interesting that the differences obtained here have considerable resemblance to those obtained in an earlier study. In that investigation (reported by Flament, 1967), subjects took turns giving commodities to each other. These varied in cost to the giver and value to the receiver. The relation between cost and value was not perfect, however, and the giver knew only his own cost, so he could not be sure how much a specific gift was valued by the recipient. All subjects interacted with a programmed player who gave commodities of varying and modest value on his successive turns. The study was conducted at four laboratories and evidence was obtained in each case as to what commodities the subject gave and what reasons he gave for his choices. Through an analyses of the latter, Flament ascertained that the major dimensions of individual difference at two of the laboratories (Aix-en-Provence and UCLA) was different from that at the other two (Louvain and Dartmouth). (The reader will note the correspondence to the D and E samples, respectively, in the present study, UCLA being in the D set and Louvain and Dartmouth, in the E set.) In the first two instances, subjects were mainly different in their degree of "social interaction", that is, in the degree to which the gift they gave each time depended upon what they had just received. Some subjects (can we describe them as "active"?) responded in a highly contingent manner and others ("passive"?) gave the same gift each time without regard to what they had received. In the Louvain and Dartmouth samples, the main difference among subjects was in "generosity vs.

profit orientation", that is, in the cost to themselves of the gifts they gave. Some subjects (the "good" ones?) gave costly commodities and others ("bad" ones?) kept their own costs down.

Thus, there are striking parallels between the two studies, both in the empirically derived groupings of sites and in the definitions of the major dimension of individual difference within the two groupings. The two studies seem to reflect the same distinction between different samples of subjects, and the "dynamism" vs. "evaluative" distinction seems to describe the difference rather well.

The evidence from the earlier study makes salient two important additional considerations: (1) Certain overall characteristics of the behavior within a given sample (say the E sample) may reflect in part the general level of the subjects on the other dimension (say the D factor). This is illustrated by the fact that the earlier Louvain and Dartmouth samples, differentiable on the basis of "generosity", were generally high on contingency. That is, the degree of contingency was high for both more and less generous subjects. This suggests, of course, that the general level of "activity" was high throughout the sample. This implication is consistent with evidence from the present study that there was a high level of activity within the E sample as indicated by both the pre-game ratings and the long trial times. (2) The effect of a given dimension may vary from one situation to another. Thus, in the present study, cooperatively inclined subjects in the D sample (that is, the less active) seemed to evolve rules as a means of handling the conflict in the situation. In the earlier study, the less active (low contingency) subjects tended to be very low in "generosity". These two facts together suggest that in a situation where passive subjects are not able to handle their interpersonal conflicts by rules or by some similar impersonal device, they will tend to discontinue responding to one another and, in effect, withdraw from interaction. In the commodity exchange situation employed in the earlier experiment, establishing explicit rules was not possible but withdrawal was and it could be accomplished by means of disregarding the other person's gifts and giving him very little.

c. An unanticipated result: As noted above, the attempt experimentally to vary the relative dependence of the two persons upon agreement was not successful. However, an incidental finding with respect to the independent values seems worth highlighting in view of its consistency with results from other investigations. This is the fact that the independent values (the values each bargainer would obtain if they failed to agree) were consistently underestimated. That is to say, when subjects were asked at the end of each trial to estimate the independent value their opponent had had that trial, their estimates tended to be smaller than the true values. This is similar to results obtained by Pruitt and Drews (1969) and, as they suggest, may reflect a tendency for wishful thinking. Or it may indicate that a moderate degree of distrust existed in these relationships which would be consistent with the occasional occurrence of misrepresentation of the independent value. A similar result but for a very different situation is reported by Shure and Meeker (1968). The game required two persons to work out a division of a set of territories, some of which were especially valuable to one party or the other. The degree of conflict was varied by varying the number of areas of high value for each person. Post-game questions revealed that players

tended to underestimate by about 25 percent the number of areas that were of high value to the other player. Thus, in effect, the subjects underestimated the degree of conflict inherent in their relationship. These several instances of such underestimation suggest the following hypothesis for test in future research: When persons interacting in a mixed-motive relationship allocate responsibility for the conflict they experience, they underestimate the contribution of the common external situation (the bargaining problem) and overestimate the contribution of the other party. The data summarized above would indicate the truth of the first part of the hypothesis, an underestimation of the degree of conflict due to the common external situation. There is, of course, a third agent possibly responsible for the experienced conflict, namely the person himself. The hypothesis asserts that the underestimation of the external situation's causal role in their conflict is accompanied not by an overestimation of their own contribution but of that of the opposing party.

d. Methodological aspects: Certain methodological difficulties are inherent in between-laboratory comparisons of game behavior. Some of these problems were of considerable importance in this study and, of course, must be taken into account in the interpretation of sample differences noted above. Our full report discusses the following methodological problems in the light of our experience with this experiment: Sample differences unrelated to cultural differences, recruiting procedure, procedural variations, experimenter effects, rater bias, and physical setting.

### 3. The basis of ingroup-outgroup conflict.

No new results to report. Professor Tajfel and Deutsch continue gathering data on this problem.

### 4. The effect of within-group relations upon intergroup relations:

During this reporting period, plans were made to replicate Professor Thibaut's study (on persuasive arguments addressed to a mistreated minority group in order to maintain their loyalty) in at least one of several of the European Laboratories (Paris, Utrecht or Louvain). The necessary experimental materials were reproduced (tapes, questionnaires, data forms, etc.) and supplied to these laboratories.

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